

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) Monitoring system for monitoring the progress of neurological diseases, comprising

-- at least one observation station (3) for a plurality of individually selectable patients, the observation station having an electronic camera (9) automatically controlled for recording video motion pictures, devices (10) for marking an object field to be covered by the camera (9), and devices for automatically identifying the patients, whereby the identifying devices are operative to automatically activate the camera to record the patient concerned, after identification, while the patient carries out predefined movements in the object field,

-- an automatic storage device for the digital storage of video motion pictures of the patient selected pursuant to identification data, which are to be recorded at preselected intervals by the camera (9) in the observation station (3),

-- a video display device (7),

-- an image processing system for automatically processing the video motion pictures of each individual patient, upon request by an attending physician, recorded at the intervals to be in uninterrupted sequence and displayed on the video display device, wherein the sequence of video motion pictures of the patient is shorter than the time intervals.

2. (Previously presented) System in accordance with Claim 1, comprising a plurality of observation stations (3) and a central evaluation center spatially separated from the observation stations, wherein the central evaluation center contains the video display device (7) and is configured to be connected with the observation stations for the purpose of data transmission.

3. (Previously presented) System in accordance with Claim 2, wherein the central evaluation center consists of a computer.

4. (Previously presented) System in accordance with Claim 2, wherein the observation station contains a computer unit (11) connected to the electronic camera.

5. (Previously presented) System in accordance with Claim 4, wherein the computer unit (11) is provided for data communication with the central evaluation center (1) and contains the storage device and the processing system.

6. (Canceled)

7. (Canceled)

8. (Previously presented) System in accordance with Claim 1, comprising a programmable signaling device which is carried by the patient and produces signals that remind the patient to take his medication and/or to go to the observation station.

9. (Previously presented) System in accordance with Claim 8, further comprising devices (15, 20) for automatic programming of the signaling device on the basis of input data.

10. (Previously presented) System in accordance with Claim 1, further comprising devices for automatic coordination of observation times.

11. (Previously presented) System in accordance with Claim 1, wherein the image processing system is configured to go beyond sequencing to process the recorded images themselves.

12. (Previously presented) System in accordance with Claim 3, wherein the computer is a personal computer (4).